



THOMAS G. NEWMAN,
EDITOR.

Vol. XLVI. May 31, 1890. No. 22.

You ask me what is life?

'Tis like the slow unfolding of a rose,
Whose heart of gold glints thro' the folded leaves;
A hint of fuller life that is to be.
A picture where the sun and shadow blend,
(Ah! me, there's shadow oftener than sun);
A lost chord from some harmony divine,
A harp with golden strings, which, rightly touched,
Evoke such melodies as angels love;
A never ending struggle for some goal
That few may reach, but, ah, so many miss;
A segment of that circle infinite
We call Eternity; a boundless plain,
Whose center and circumference is Love.

F. A. JONES.

Be Careful to use none but nice clean sections for comb honey. Old and soiled sections should be used for kindling rather than for honey. New ones are so cheap now that to use any other than those in first-class condition is inexcusable.

Patriotism is the subject of a new book of over 300 pages, written by that eminent and popular preacher and author—Rev. H. W. Bolton, D.D., LL.D., of Chicago. The "Introduction" is by Col. Jas. A. Sexton, an enthusiastic and well-known member of the Grand Army of the Republic, among whose constituency the work will no doubt find a ready demand. The book consists of a series of very interesting and instructive lectures given by the author before various patriotic organizations, which, besides being illustrated, should command a large number of readers, especially of those who fought in the late War, and of the sons and daughters of veterans, in fact, any one possessing a single spark of patriotic feeling. It is handsomely bound in cloth, and is published by Messrs. Transue & Grimm, of Chicago.

Hon. James Heddon, Mayor of that enterprising city of Michigan—Dowagiac—was in the city last week on official business, and made the *BEE JOURNAL* a friendly visit.

Painting Bee-Hives.—The painting of hives is now under discussion again, and in last week's *Western Plowman* Mr. C. H. Dibbern makes these remarks about it:

Shall we paint our bee-hives? This question has lately been raised again, and there are some reasons for leaving them unpainted. They are not so hot in summer, nor so cold in winter. The cost, too, is quite a consideration. But on the other hand they do not look so well, nor last so long. Boards are also more apt to curl up, and roofs become leaky. Some 15 years ago we used unpainted hives, but after a few years of experience we commenced painting them again. The same reasons for painting hives apply to houses. I believe there is a colony in Iowa who do not believe in painting their houses, believing that it is cheaper to buy new boards occasionally than spend money for paint. This may be a fair question for discussion, but what a looking spectacle does an unpainted apiary or town present! As nearly all civilized people paint their houses, we must conclude that the weight of evidence is vastly on that side.

What if the paint does cost a few cents, who, having any eye for beauty or the appropriateness of things, would want to see unpainted hives in an apiary? To our mind the idea is simply preposterous! Look at the lovely floral offerings now to be seen on the trees which are soon to yield their fruits for the pleasure and sustenance of man.

See the lovely carpet of verdure spotted with flowers of gold, which Nature has spread before our eyes in meadow and on hillsides!

Contemplate the variegated loveliness of autumn's landscape, spread before our wondering eyes by the Giver of all Good.

Just think of the grandeur and beauty with which Nature greets our astonished vision, and then try to imagine an Apiary where the hives are unpainted, and the ugly and dilapidated boards are going to ruin and destruction!

It is a burlesque—a disgraceful "Cheap-John" idea, which should find no favor anywhere in a world which God has made beautiful for man's comfort, satisfaction and consolation!

We should paint our houses, our barns, our fences, and — our hives, for the same reason that God has painted the rainbow, and studded the firmament with stars!

The Missouri State Bee-Keepers' Association has affiliated with the "International." That is right. The sooner the latter becomes a representative body, the better. It may then become in fact what it is now in name only—International. Let the good work go on until every State, District and Local Society is represented in it, and then its power and influence for the good of the pursuit will be felt in every part of our common country—America.

Jamestown, N. Y., should have been the address of the W. T. Falconer Manufacturing Company, on page 348. The printer had it in New Jersey instead of New York.

Sign Boards near the road, for farmers who have honey or any other article to dispose of, are very useful, and withal they will pay. A correspondent in the *Orange Judd Farmer* offers these suggestions and remarks:

Every farmer should have a bulletin-board, or small black-board 2x4 feet, and when there is anything to spare, write it on the board and stand it up by the roadside. It may be a milch cow, a spare horse, a fat hog, a calf or colt, a few seed potatoes, plants or seeds, or any other commodity. It is your surplus; somebody wants it, and would buy it if he knew where it was. A few years ago I wanted to buy a cow. I rode three days and stopped at many houses to make inquiry. It occurred to me then that a farmer's Bulletin-Board would be a good thing for buyers and sellers.

We fully agree with this suggestion, and as many honey-producers are already practicing it, why do not bee-keepers generally use it, and thus reap the full benefit?

A B C of Bee-Culture, by A. I. Root, has again been revised and enlarged, and the new edition is now on our shelves. It contains 420 pages, and is profusely illustrated. It is the cheapest, and one of the best—if not the very best of all the books on apiculture in existence. We congratulate friend Root upon the perfection and excellence of his book. The author says: "The subjects in the body of the book, that have received special revision, are Comb Honey; Feeding (the latter being entirely re-written); Extracted Honey; Hive-making, with a description of how to make the new Dovetailed hive; Queen-rearing, with a brief summary of Doolittle's method of procuring and completing cells in full colonies with a laying queen; Swarming; Veils, and Wintering. The last subject was entirely re-written, so that it is the very latest in regard to the in-door and out-door methods. The whole subject is well illustrated."

To Equalize the population in the hives, it is now high time, so that all the colonies in the apiary may be ready to gather the June harvest. Mr. C. H. Dibbern, in the *Western Plowman*, remarks on this subject thus:

May is pre-eminently a month of preparation and anticipation for the bee-keeper. Every care and attention should be given every colony in the apiary to place each in the most favorable condition to breed up rapidly. It is the bees produced this month that will gather in the clover harvest in June. It will pay well to equalize colonies now, and place all on an equal footing. Where no attention is given on this point, a few will be booming, and will swarm by the time the first clover blossoms appear, while many others will be so weak that they have barely managed to hold their own. It is more profitable to have all do well than to have a few that produce extra yields, and many that yield next to nothing. During fruit bloom is a good time to do this equalizing, as there is then little danger of robbing.

In some places it is too late to do this—in others, further North, it will be in time.

GLEAMS OF NEWS.

Honey-Dew and Plant-Lice.—

On page 264, Mr. A. C. Tyrrel, of Madison, Nebr., in an article referring to the scanty knowledge about the winter losses of bees, gives some of his observations regarding honey-dew and its origin; and on page 314, Mr. M. A. Kelly, of Slippery Rock, Pa., also advances his "secretion theory" of honey-dew, and suggests that those who hold to the "excrement theory" concerning its origin, send him samples of leaves "having the honey-dew and the aphids" on them, for examination. In reply to this request, Mr. Tyrrel has sent us specimen leaves with aphides and "honey-dew," and comments as follows about it:

I send you a twig covered with lice and so-called honey-dew, for your opinion concerning the same. You will notice by examining the leaves that they appear to be covered with excrement, or a substance resembling honey thinly spread out, fairly glistening in the sunlight. You will also notice, if the lice do not drop from the twig in transit, that there are hundreds of them, and a few in an advanced stage having wings.

It is true, I do not live in a "wooded country," but we have hundreds of box-elder trees surrounding our residence, and there are many large trees of the same variety growing on the creek and river banks. As these trees produce sugar nearly equal to maple-trees, I think it not unreasonable to infer that from the incisions in the leaves and tender twigs by the pests, oozes the sweet matter improperly called honey-dew, and that in reality it is caused by lice, and cannot be attributed to "conditions of the atmosphere."

If this were not the case, why is it that those trees thus infected only are covered with the sweet, sticky substance, which seems to me *prima facie* evidence of the truth of my allegations, viz: that honey-dew does not drop from the heavens like the purported fall of manna, neither is it produced by atmospheric conditions, but that it is either excrement from or dripping of the juice from leaves punctured by lice or slugs.

After all that can be said *pro* and *con* on this subject, I think it makes but little difference, so far as the health of our bees is concerned, where the stuff comes from, and I do not care to say anything more on this subject hereafter.

A. C. TYRREL.

We have no opinion to offer as to the origin of the so-called "honey-dew." We prefer to leave that matter to scientific minds to determine. We have sent the twig to Mr. Kelly, after making an examination of it. We desire to hear from Prof. A. J. Cook, and shall value his "opinion" very highly.

Handling Bees.—This is the title of a nice pamphlet containing 28 pages and a cover, published by Chas. Dadant & Son. It is a chapter from their book, *Langstroth Revised*, and is an excellent thing for beginners. Price, 8 cts. For sale at this office.

A "Directory of Writers" is the name of a comprehensive book soon to be offered to the public.

A means of easy inter-communication between writers, editors, and publishers has long been needed. To supply this need, the editor of *The Writer*, the Boston magazine for literary workers, has undertaken to compile a "Directory of American Writers, Editors, and Publishers," which will be published at the earliest possible day. No charge whatever will be made for the insertion of names and addresses in this directory, the usefulness of which, particularly to editors and publishers who wish to communicate with writers, will be evident at a glance.

The desire of the editor is to make the directory as nearly complete as possible, but the army of minor writers is so great that it will be necessary to limit the number of addresses in some reasonable way. It has been thought best, therefore, to include in the first edition only the names of writers who have had a contribution printed in some one of the leading magazines or weekly periodicals during the last five years, who have or had a book published within the last ten years. Writers who are included in either of these classes are requested to send at once to the editor of *The Writer*, P. O. Box 1905, Boston, Mass., the following items of information:

1. Name of writer.
2. Present residence.
3. Permanent business address.
4. Literary specialty.
5. Titles of principal articles or books printed, and dates of publication.

This information should be sent promptly, for the directory has been for some time in preparation, and its publication will not be long delayed.

The editor of the directory will be obliged, if, in addition, writers will send on a separate sheet, *not for publication in the directory*, autobiographical particulars, including date of birth, place of birth, parents' names, date of marriage, name of husband or wife, successive places of residence, title and date of first work printed, list of later works, and other such matter as would be suitable for publication in a "Biographical Dictionary of American Authors," now in course of preparation.

By the prompt co-operation of those who are interested in the matter, the early publication of the directory may be secured. Editors of periodicals, to whom the directory will be especially useful, are requested to aid in the compilation by sending to the editor the addresses of contributors who do good work, but who may not have a national reputation. The more of such addresses the directory contains, the greater its usefulness to editors will be.

The authors of bee-books and writers for bee-periodicals should send their names, addresses, etc., so that the bee-interests may be represented, as becometh their importance.

The Eighth Edition of our book, entitled "Bees and Honey, or the Management of the Apiary for Pleasure and Profit," is now published, and ready for delivery. This edition has been largely re-written, thoroughly revised, and is "fully up with the times" in all the improvements and inventions in this rapidly-developing pursuit, and presents the apiarist with everything that can aid in the successful management of an apiary and at the same time produce the most honey in an attractive condition. It contains 250 pages, and 245 illustrations—is beautifully printed in the highest style of the art, and bound in cloth, gold lettered. Price, \$1.00, postpaid.

Here are some of the earliest comments on this new edition:

The 8th edition (revised) of "Bees and Honey" is on my desk, and a gem it is: printed on paper of the finest finish, and with the clearest of type, fully up to the times, profusely and beautifully illustrated—making it, as an album alone, worth the dollar charged for the book. In answering the many inquiries as to the best bee-books, I shall be proud to place at the head, "Bees and Honey, or the Management of an Apiary for Pleasure and Profit," by Thomas G. Newman, editor of the *AMERICAN BEE JOURNAL*.—Geo. E. Hilton, Fremont, Mich.

When turning the leaves of my copy of the new edition of your book, entitled "Bees and Honey," I was much pleased to find in it the portraits of so many of the leading apiculturists, and unexpectedly found my own among them. I am sure I can never repay you for the honor you have done me.—Eugene Secor, Forest City, Iowa.

The new edition of "Bees and Honey" is received. It is an excellent work, with nothing lacking in perfection and beauty, and will speak for itself to the mind of every reader. It is well worthy of a large circulation. I shall use it as my daily hand-book, and recommend it to bee-keepers with whom I come in contact. It is cheering to notice the countenances of the many masters of the art, whose able articles aid apiculturists through the columns of the *AMERICAN BEE JOURNAL*.—Stephen Roese, Maiden Rock, Wis.

Complimentary Words.—Here are some of the newest expressions of satisfaction from our patrons:

My advertisement of Japanese buckwheat seed for sale, which I put in the *AMERICAN BEE JOURNAL*, brought more orders than I could fill. So I bought my neighbor's crop, which is now almost gone. I hope that none will send me the money until they have written, for I do not want to send back hundreds of dollars.—E. C. Eaglesfield, Berlin, Wis.

I have received the seed. Well, to tell the truth, if a man could get supplies that quick, when he wanted them, it would save lots of money, and hard words, too.—C. K. Reading, Davenport, Iowa.

The Singer Sewing Machine you sent me, does splendid work. I am well pleased with it.—G. Ruff, Burlington, Iowa.

My bill of goods I ordered from you reached me all right and in good condition—everything as I ordered.—ROBT. HARVEY, Aurora, Ills.

QUERIES REPLIES.

Space Bees will Least Likely Fill with Wax.

Written for the American Bee Journal

QUERY 709.—There is undoubtedly a certain space which the bees are least inclined to fill with wax or propolis. What, according to your own experience, is the exact measurement of the correct bee-space?—New York.

Three-sixteenths of an inch.—EUGENE SECOR.

About $\frac{1}{4}$ of an inch.—J. P. H. BROWN.

Five-sixteenths of an inch.—G. M. DOOLITTLE.

Scarcely $\frac{1}{8}$ of an inch; about five-sixteenths of an inch.—A. J. COOK.

A little less than $\frac{1}{4}$ of an inch.—DADANT & SON.

Five-sixteenths of an inch, as nearly as you can get it.—H. D. CUTTING.

Three-eighths of an inch; possibly a shade scant.—MRS. L. HARRISON.

A strong quarter of an inch, or five-sixteenths of an inch, is just right.—C. H. DIBBERN.

I may not be authority, but I use $\frac{3}{8}$ of an inch.—J. M. HAMBAUGH.

Three-eighths of an inch is generally supposed to be the correct bee-space.—WILL M. BARNUM.

I do not know. It is less than $\frac{3}{8}$ of an inch, and more than $\frac{1}{4}$. Perhaps five-sixteenths of an inch is about right.—C. C. MILLER.

Five-sixteenths of an inch, but with a $\frac{3}{8}$ -inch space there is but little, if any, more wax or propolis deposited.—A. B. MASON.

More depends upon having absolutely smooth surfaces, than on the distance apart. I have not determined, to my own satisfaction, the exact space. One-fourth of an inch is not far wrong.—M. MAHIN.

If I could be always sure of having what I wanted, I would have bee-spaces $\frac{1}{4}$ of an inch; but as wood so often springs, allowance must be made so that the bee-spaces may not be too small.—R. L. TAYLOR.

The proper space is just between too wide and too close; and I think that a shade less than five-sixteenths of an inch is as near as can be practicably reached. Wood will shrink and swell a little, and top-bars of frames will get a little "off," no matter how accurately made, and the best that I can do is to aim at a five-sixteenths of an inch space.—G. W. DEMAREE.

The same that Father Langstroth gave us over 30 years ago—scant $\frac{3}{8}$ of an inch, or, more exact, five-sixteenths of an inch above the frame; $\frac{3}{8}$ of an inch will do very well at the ends of the frames, and $\frac{1}{2}$ inch is all right at the bottom, below the frames.—JAMES HEDDON.

The exact measurement of the correct bee-space is $\frac{1}{4}$ of an inch, or a space that a bee can move in freely; but five-sixteenths of an inch is the space that should be provided between the brood-frames and the ends of the hive, to facilitate the removal of the frames without killing bees. Queen-excluders that come within $\frac{1}{4}$ of an inch of the top-bars of the brood-frames, greatly lessen the building of burr-combs.—G. L. TINKER.

It is impossible to fix frames in practice so that they will space exactly throughout the whole hive. I use the 10-frame Langstroth hive, $14\frac{1}{4}$ inches wide, spacing the

frames so that a $\frac{3}{8}$ -inch dummy will fit closely in one side of the hive. I use the dummy for convenience in working, and consider the spacing as above stated to be as nearly right as is possible to get it.—J. E. POND.

The exact measurement of the space required for bees, for easy passage, is five-sixteenths of an inch, but they will not fill a space with comb which is not more than $\frac{3}{8}$ of an inch in size.—THE EDITOR.

CORRESPONDENCE.

SPACING COMBS.

The Proper Distance—Number of Cells to the Inch.

Written for the American Bee Journal
BY DR. C. C. MILLER.

I have been much interested in reading the article on page 313. Some things in it make me think of Mr. Faylor as a careful and independent experimenter, finding accepted theories wrong, while other things in his article raise the question whether his own theories are not too hastily formed. That "the black bee is rapidly giving way to the 4 and 5 banded Italian," I think is hardly correct. Most bee-keepers have only 3-banded Italians, and I doubt whether many of them care to increase the number of bands.

With regard to the spacing of combs, I am glad that he has called in question the practice of many, whether he be right or wrong. The fact is, it seems to me that too many have settled upon $1\frac{1}{2}$ inches, or some other distance, without any reason for their conclusion, and it is high time to ask *why* is $1\frac{1}{2}$, $1\frac{1}{4}$ inches, or any other distance, the proper one for spacing? Mr. Faylor gives us a weighty argument when he gives us the testimony of the bees themselves.

Now, if, as Mr. Faylor says, all the main combs in a box-hive are placed not less than $1\frac{1}{2}$ inches apart, there should be some very good reason for spacing closer. I am sorry to say that I have no ready means to verify his observations. I think that it would be a favor to the fraternity, if a number would report in the AMERICAN BEE JOURNAL, as to the distance from center to center of the central combs in a box-hive. Even if we should find $1\frac{1}{2}$ inches the rule in box-hives, the advocates of closer spacing might say that bees left to themselves will use a spacing that will allow the building of drone-comb; and we don't want drone-comb.

The argument that wide spacing gives more room for storing honey above the brood-nest for winter, has force.

That "bees are more liable to swarm where the combs are hung too near each other," may be true, but if less than $1\frac{1}{2}$ inches is considered "too near," it runs violently afoul of Mr. Pond's plan of preventing swarming by shaving combs down to $\frac{1}{4}$ of an inch, and leaving only a bee-space between, thus spacing from center to center, $1\frac{1}{4}$ inches, or less. It would require a good deal of testimony, I think, to make the mass of bee-keepers think that spacing less than $1\frac{1}{2}$ inches induces swarming.

Do the observations of others agree with those of Mr. Faylor, that more brace-combs are found with $1\frac{1}{4}$ or $1\frac{1}{2}$ spacing than with $1\frac{1}{2}$?

NUMBER OF CELLS TO THE INCH.

When I read that Mr. Faylor intends to throw away his old foundation machine, and use one that will make $4\frac{1}{2}$ cells to the inch, I cannot help wondering if he is fully posted as to experiments already made in that line. Years ago, Mr. A. I. Root made foundation $4\frac{1}{2}$ cells to the inch, and received some left-handed "blessings" for it. I had some of it. The bees did not seem to know whether it was drone or worker comb, and did not appear to relish it for either.

Mr. Faylor is a very brave man to intimate that bees, of their own accord, build worker-cells larger than 5 to the inch. Are all the books and observers of the last hundred years in error on this point? If Mr. Faylor does not want to lose reputation as a careful observer, he will do well to make some critical measurements, and send samples to the editor. I think that I can find combs by the hundred, from 5 to 20 years old, that contain cells measuring 5 to the inch, and yet they produce just as large workers as when the combs were new. I think that others have given testimony to the same effect.

P. S.—I ought to say that bees do not build comb exactly 5 cells to the inch, but about 4 4-5; and that comb foundation is also made the same size. Until I measured, I supposed that exactly 5 cells to the inch was correct.

Marengo, Ills.

ILLINOIS.

Report of the Capital Bee-Keepers' Convention.

Written for the American Bee Journal
BY C. E. YOCOM.

The Capital Bee-Keepers' Association met at Springfield, Ills., on May 7, 1890. The convention was called to order by President P. J. England.

From the report of the members, we gather that of the 599 colonies left on

the summer stands, 27 (4½ per cent.) were lost; of the 152 colonies stored in cellars, 15 (9 4-5 per cent.) were lost—a difference of 5 3-10 per cent. in favor of out-door wintering, the past winter. Of the 21,900 pounds of comb honey produced in 1889, only 50 pounds remain unsold, and of the 8,170 pounds of extracted honey, 570 pounds remain unsold.

After disposing with the Order of Business, Mr. Jas. A. Stone, of Bradfordton, Ills., read an essay on

Comb Honey—Production, Care.

Comb honey, in all its purity, and without a possibility of adulteration, is one of the healthiest, and, we might say, the healthiest sweet that goes upon the market.

While the sweets of commerce may be—some of them—pure and unadulterated, yet it is possible to make them otherwise, and it is a shame to say that some one is ever ready with his process by which to make a profit by imposing on his fellows. But thanks to the Giver of all good things, that He has made the little honey-bee so wise that it can make a comb that cannot be imitated, in which to deposit the honey it gathers.

We will say nothing of the adulteration of extracted honey—except that the price of the same is so low that we do not believe it is carried on extensively, as there can be but little, if any profit. But while there is as pure a sweet as comb honey is acknowledged to be, let us lend our time for a few moments to the consideration of its "production and care."

There are many points to be considered, but we shall only touch on one or two of them, that we think are most vital.

KIND OF BEES.—We ought to have the kind that will gather the most honey, unless they are more dangerous as regards "life, liberty and the pursuit of happiness;" and, in the Italian, we claim to have a bee superior in disposition, as well as other qualities, to the native bee.

Since the importation of Italian bees to the United States in 1860, they have increased rapidly, and have become very favorably known. They are superior to our native bees, in their large size and greater beauty; they are more prolific, longer lived, more industrious, less sensitive to cold, and they swarm earlier and more frequently, and continue later than common bees. Rev. L. L. Langstroth said that his Italian colonies gathered more than twice as much honey as his colonies of common bees; and Mr. Quinby said that in all his experience, he had not received an unfavorable report of them.

KIND OF HIVE AND SECTIONS.—Of late years we all know that there is no market for honey in the old-fashioned box. And why? Because it is superseded by the one-pound section. In all the commercial world, the object sought is to get things into the best possible shape for handling; and this shape for comb honey is conceded to be the one-pound section. Then, it follows, that the hive used should be the one in which we can handle the sections with the greatest ease and convenience, regarding stickiness, irritating bees, etc.

We want a hive having a section-case in which the sections are so placed as to be easily taken out when full; or, if not desired to be taken out, the case raised and an empty one placed under it; and so on, tiering up indefinitely, and thus leave the honey in the care of the bees (as they can care for it better than we can) till we want it for market, or, if the time comes for storing away for winter, we can take it from the hive in the case without loosening or breakage.

PASTURAGE FOR BEES.—The bee-keepers of this part of the country have learned that in the years when white clover is a failure, the surplus honey crop is also more or less a failure, which proves that it is our best honey-producing plant; also, the honey it yields demands the highest market price.

Other plants, such as Spanish-needle and heart's-ease, sometimes yield a good supply of fall honey, but to encourage their growth is to grow weeds. Buckwheat sometimes furnishes well, but I have seen it in full bloom when it did not produce at all. Catnip and motherwort are excellent honey-producers, but the trouble with them is that they never become plentiful enough, for they are biennial, and easily killed out where land is cultivated, and are almost useless for other purposes, except medicinal.

In some localities golden-rod is valuable as a honey-plant, but I have failed ever to see a single bee gathering from it. Alsike clover (where it has become common) is conceded by bee-keepers generally, to be ahead of all other plants—for this and many other States—as a honey-plant. The attendants upon the Northwestern Bee-Keepers' Convention spoke in high praise of this clover as a pasture for stock as well, and for mowing for hay; and many who had tested it preferred it to red clover, to mix with timothy—its good points being that it ripened with timothy and cured as quickly. So in summing up honey-plants, I believe our best plant is the Alsike clover.

With all the above-named plants favorable, the bees will produce the

coveted sweet; but I do not believe that it is wise to be over-anxious to get the first drop of honey that it is possible for the bees to secure in the spring, and thereby starve the brood. In other words, I do not believe in "killing the goose that lays the golden egg;" but I do believe in first providing for the life and health of the "goose," that she may "lay" many "golden eggs."

But one says if they do not produce stores enough to carry them through, feed them on something less valuable than honey. The question then arises, Is that possible, in the light of reason? I do not believe that there is any other food for bees that is as good as that which they gather where Nature has supplied it, notwithstanding the authority on the other side of the question.

Suppose one gets his bees through the winter on a food that is much cheaper than another uses, and eventually (though perhaps not for a year or two) some disease—diarrhea, foul brood or what not—breaks out among them, and the profit ceases, bees and all. "But," you say, "these diseases will sometimes come anyway." Certainly; but we notice that those who are crying most in favor of feeding are those who have the most disease in their apiaries to cry about. We noticed in the Northwestern Convention last fall, that the very man who had the most to say about a bee-feed to prevent diarrhea, was the same man who said most about his bees being troubled with it. I quote from the American Cyclopaedia, when I say, "Feeding should never be attempted as a matter of profit."

CARE OF COMB HONEY.—In storing, it should have a warm, dry place; and one said in the convention last fall, that it ought not to be tiered within 6 inches of the wall of the room.

In marketing, I believe that our first, last and all-the-time rule should be—*Tidiness*. We should not let our honey go into the market with impressions of our thumbs on the sections. Nothing would be more vexing, than for one to offer his honey to an old customer, and have him say, "Why, here is some honey I got from Mr. A., at 2 cents less than you offer yours, and I can't sell it." You look at it—you do not wonder that it will not sell, for it has no inviting appearance. If men do not know it, the sooner they learn it the better, that almost everything is sold to the majority of people on its looks; and tidiness is first considered when the appetite is being tempted.

In the first place each section should have the wax scraped off around the edges, where the bees have come at it,

and then it should be placed in a nice, clean shipping-crate. I prefer the single tier, as there is no drip from the upper to the lower sections. Have glass in one side, and do not let it go to market in such a shape that you cannot see through it, for it is there to look through.

Some of the grocers send back the shipping-crates in a very bad condition, and I have noticed that they are the ones who sell the least honey (i. e., where they show it in the cases), and the cases ought to be nice enough to show the honey in.

In some instances when I have furnished private families, and afterwards called for the crates, they would go to the cellar for them. In such cases, they seldom give the second order. The probabilities are that the honey lasted longer than it was good. People must learn that warmth and dryness are requisite to the good of honey—not a cellar. Some of the productions of man keep best in the cellar, but that is not the proper place to keep comb honey.

JAS. A. STONE.

Mr. Robbins—Are your bees all Italians?

Mr. Stone—No; some of them are not.

Mr. Robbins—What is your sign of purity?

Mr. Stone—Three yellow bands.

Mr. Robbins—That is not a sure sign. I have had bees that had three yellow bands, and were Italians so far as looks were concerned, but their disposition proved them to be hybrids. The finest looking bees are not always the best. I once got some bees from a bee-keeper that were black; I wrote to him about it, and he replied that the color had nothing to do with it. They proved to be good bees.

D. D. Cooper judges by temper, and clinging to the combs, rather than by yellow bands. He also had some bees from the same bee-keeper mentioned by Mr. Robbins, that were black, but good bees.

Mr. Draper—I had queens in 1870 that were better than any I ever had, or could find, since. Has anybody ever seen black or German bees that stuck to the combs while being manipulated?

Mr. Stone had not, neither had he ever seen Italians that were well marked, that did not stick to the combs.

Mr. Kennedy judges the purity of bees by their actions.

Mr. Becker does not bother about bands. He feeds his bees sugar for winter stores, and is successful, while his neighbors, who feed honey, fail in wintering. Last winter was a bad winter for bees to consume their stores.

The convention then adjourned till 1:15 p.m.

AFTERNOON SESSION.

The convention was called to order at 1:15 p.m., with President England in the chair.

KINDS OF HIVES USED.

This subject was brought up, and the Simplicity, Improved Langstroth Simplicity, and the old style Heddon were mentioned.

Mr. Cooper uses the latter, and likes them best, although the Improved Langstroth Simplicity, as now made, are better than they used to be.

Mr. Stone—Wherein is your hive better than the Improved Langstroth Simplicity?

Mr. Cooper—The honey-boards prevent brace-combs, and sections can be taken out easier than from the Improved Langstroth Simplicity.

Mr. Stone uses the Improved Langstroth Simplicity, and has no trouble in getting the sections out of the super. The Secretary also uses the same, and experiences no difficulty in removing the sections. At one time he was so well pleased with the appearance of the old style Heddon hive, that he made one for trial, but as it was late in the season, and the weather cool, he had trouble in getting the sections out without spoiling them. This hive is used for only comb honey, while the Improved Langstroth Simplicity is a general-purpose hive.

Mr. Geo. F. Robbins, of Mechanicsbrug, Ills., then read an essay on

Creating a Home Market.

One day last summer I chanced to stand for a few moments on the pavement near the Farmers' National Bank, when a group of four newsboys and boot-blacks came round the corner, and proceeded to besiege me for a job. A silent shake of the head repelled all attacks, but the assault was in turn renewed upon several other pedestrians with like success. At length, one of them said: "Come, let's go over to the other side of the square," and for the other side they started. I will follow them pretty soon.

When I began to cogitate as to what I should say upon this subject, I thought to urge, as usual, for it is one of my hobbies: Work up your home market. Sell to your neighbors. Sell all you can at and near home. Then I remembered what one of Springfield's leading grocers said to me in 1886, "that honey cut into the syrup trade like everything;" and I thought, when I urge honey upon a neighbor, do I not work against the business of someone else? Do I not press the honey-trade at the expense of some other commodity that may have a prior

claim? As I crowd myself and mine in, do I not crowd others and theirs out? And then I thought about these boot-blacks.

Now let us not say right here that humanitarianism has no place in the business world—we do not think or feel that way. Though the selfish in their nature may seek to crowd it out, or the cynical to disown it, yet business men are at heart interested in the welfare of their fellow men. Here were four shiners, each one working for himself, in a sense, in opposition to the rest, yet each one saying to his fellows, "Come, go with me." I say opposition, in a sense, for he is only seeking his own, not another's. Let me, not him, shine your boots;" but if his competitor gets the job, it is fairly won—it is his.

It fitly illustrates the state of things in this business world; a hundred boot-blacks, a hundred merchants, a hundred farmers, may be all in competition, all grasping for the same prize to the exclusion of the others, yet each saying to all, "Come, go with me;" and what is true of persons is true of occupations and commodities. A thousand articles on the merchant's shelves, all striving together for the patronage of the consumer; and the advent of a new boot-black, or a new article, or industry upon the arena, has only the ultimate effect to produce a more persistent striving. The one elbowed out here, must only push in yonder. The supply will seek a demand.

A trade or business will strive, so to speak, to find its level. It is this striving that constitutes the very life of business. Why do the waters in their streams flow on with such restless energy? What is the secret of their wonderful power—a power so great that it requires a breakwater of almost adamant strength to arrest their progress for a moment? Why is it that though when damned in their channel they may present a smooth, quiet surface, the moment they reach the edge of the precipice they charge over and on with a force and fury augmented in proportion to the resistance which they have met? Why, the waters are simply seeking their level. So it is in the business world. Trades and industries will find their level, and when turned from one channel, they will seek another. Honey is itself no exception to the rule. It is comparatively a new article—the world of commerce is working its way; but though honey may crowd out some other commodity to-day, some other will strive with it to-morrow.

A young man was once employed to sell a certain article to the trade. A few days after he started, he wrote to

his firm, "There are three men ahead of me selling a like article. What shall I do?" The answer came quick and terse: "Go on. There are fifty more behind you." So our product—honey—must not only strive with all that has preceded it, but all that is to follow.

Now, conceding the all-important item is to create a demand for honey, how shall we do it? How can we do it best? Why, go to your neighbors right at the outset. "Bone" the first and nearest. Ask him if he does not want some honey. That is a simple way, but I deem it important and essential. To give a neighbor a little to tickle his palate, may be a good plan, but I have not practiced it much. I simply tickle this man or that woman personally, and talk them into it; and if at first I "don't succeed," I "try, try again."

Don't force a man—that is not necessary; but if there is a chance to interest him, do it. As my grandmother used to say, "Mind your p's and q's." Don't try to take him by storm—just outflank him if you can.

I believe I will break into the thread of my essay here, to tell a little story. I once sold a few pounds to a doctor, but afterwards, when I endeavored a time or two to sell him a little bit, he declined—said he was too poor. Nothing daunted, one evening last fall I approached him again on the subject. Again he declined.

"Why, don't you like it?" "O, a little—not very much."

"Where do you keep your honey when you have any? or do you know how the honey you used to have, was taken care of?" Soon I had him drawn into a little conversation on the nature and care of honey. Said I, finally, "You had better try a little of my honey."

"Well, bring me up about a dollar's worth."

Not very long after I took him the honey, he met me with, "George, got any more honey?"

"Yes, sir; 2,000 pounds of it, or thereabout."

"Bring us up another dollar's worth, will you?"

Of course I would, and of course I did.

About a week later, when I met him again, "George," said he, "what's the matter with your honey? Somehow or other, it won't keep at all. Don't know what we're going to do about it."

I said that I did not know what was the matter, unless it was that the honey was just too good to keep, and that I supposed we would just have to replace it with another dollar's worth. We did so.

Finally, one Sunday in February, the father met me in the aisle of the

church, and with a smile about the dimensions of a two-pound honey-section, said: "Mr. Robbins, the doctor's folks are out of honey. The doctor has been wanting to order more, but he said he had not got to see you." "All right," I said, "I will bring some up to-morrow evening."

There was four dollars worth to a nice customer whom I found it hard to gain. It was no small accomplishment. You see I deliver my honey. That is the right way. Don't ask a man to buy some honey, and tell him to come and get it. Don't be afraid to peddle a little. I started out to work up a trade that very way. At first my sales in half a day would hardly pay wages; but I soon learned where I would sell honey. Now they look for me to come around, and sometimes send me an order.

I do not advise hauling comb honey around much, unless you have a pretty good idea where you can dispose of it. In that case, weigh it and wrap it in about dollar packages. Be a one-priced man. Treat all alike. Better lose a sale now and then, than suffer men to "Jew" you down.

One of my best customers refused last fall to pay me my price, and I left him. I afterwards decided to do what perhaps I should have done at first—tell him if he would take \$3.00 worth, I would let him have it at his price. He bought two installments on these terms. I then adhered to the rule with others. Not many, however, will stick at the price, or take so much at a time.

I dispose of considerable honey in trade for articles which I desire. Workingmen men especially will often exchange their stock in trade—labor—for honey, when they would not venture the cash.

I have put my honey on sale in local stores, but I cannot do it with the best success. There are three villages from 2 to 5 miles from home. The most distant market is my best one, in this respect; the nearest one is the poorest. The latter I can generally supply directly with better satisfaction to all parties. In disposing of honey in this way, my practice has been to select sections as nearly even and equal weight as possible, put them into a glassed shipping-case, fix the price myself, and pay the merchant a commission. The sections of irregular weight I use to supply private customers. I have never paid more than 10 per cent. commission. One great rub seems to be to find just the right kind of an agent.

Finally, let us remember that honey is largely a luxury, and must be produced for luxury seekers. Produce a good, however, as well as a nice article

of honey. It must be made to please both eye and palate. I grow less and less disposed to sell an inferior article, without telling my customers. When my clerk came to live with me recently I put some honey on the table that I had left on the hives until fall. It had acquired the dark color and pungent flavor that such honey always does. He thought he liked it pretty well at first, although I could not eat it. But pretty soon he began to tire of it. When I put a section of good honey on the dish, and he tasted thereof, he said, "Now this tastes fit to eat. This is good." I had not told him there was any difference in quality, either.

Whatever I do, I always grade my honey, and sell the different grades at what they are worth. I have sometimes sold a very poor article at a very low price—and the purchaser seemed to like it. You know some folks have not the keen perception in taste that others have—just as it is with all the other senses. But folks will grow tired of poor honey sooner than they will tire of a good article. Indeed, judging from my own experience, I am confident that the distaste of so many to honey, is very largely (it may be principally) due to eating a poor article.

The care of honey does not belong to this subject, but the quality of honey does, for very obvious reasons, and, hence, I take it upon myself to urge upon this convention, if you would build up your home market, or any other market, study your best to produce first-class honey.

GEO. F. ROBBINS.

Mr. Cooper—Do you give any honey away to induce the recipient to buy?

Mr. Robbins—No. If you do that, he will expect more.

Mr. Stone once asked a man if he wanted some honey. He replied, "No, I don't care much for honey." The next time he was in town, he gave the man some honey, and sold to him afterwards.

Mr. Draper placed a hive with "Pure Honey" in large letters on it, in his wagon, and sold lots of honey. He soon became well known. "They even call me 'Honey,'" he said. "People salute me with, 'Hello, Honey,' or 'How-do-you-do, Honey?'"

Mr. Becker had some broken comb honey that he offered for sale. Once he was met with: "It is too late. It will not keep. I bought some extracted honey of you, and it did not keep." He sold to another man, who started into the cellar with his honey. He was stopped, and told not to put it in the cellar.

Mr. Van Doren—I never peddled any honey until last year. I got started

by some neighbors who asked me if I had any honey. I answered, "Yes, sir." They then said: "Bring me two or three (sometimes five or six) dollars worth."

Mr. Goff has no trouble in selling honey. People call for it, and he could sell more than he can produce.

SHADE-BOARDS FOR HIVES.

The Question-Box was opened, and "Does it pay to use shade-boards?" was asked.

Mr. Draper said his bees did not need them.

Mr. Becker—I do not want any shade for my bees any time. Give the bees the sun the year round. I have never seen a frame melted down, that a good colony of bees had access to. Give them plenty of room and ventilation.

Mr. Stone has his bees under a shed. The strongest colony he had last season was under a tree. He could not say which is best—sun or shade.

Mr. Robbins—Shade is a good thing in summer. I like artificial shade.

EXTRACTED HONEY—SWARMING.

Mr. England—Use large hives for extracting. To prevent swarming, do not allow the combs to get more than three-fourths full.

Wm. Yocom—If bees have plenty of room in the right place, I do not believe that they will ever swarm. In Kentucky, my father once cut 12 hollow logs, 6 feet long and 4 feet wide, and placed a smaller "gum" containing bees on top of each, so arranging it that the bees were obliged to pass down through the lower "gum." Not one of them ever swarmed until the whole "gum" was filled. My father-in-law once built a house 6 feet square, with shelves arranged on three sides, and a door in the other. Bees were introduced to this huge hive, which stood for several years. They never filled the hive, nor *never swarmed*.

HONEY FROM ALSIKE CLOVER.

"Does Alsike clover furnish more than one yield of honey in a season?"

Mr. England—My Alsike never blooms but once, to amount to anything, in a season. It furnishes no honey after being cut. It seeds itself.

Mr. Van Doren—While in Cleveland, Ohio, I learned that Alsike furnished nearly all the honey in that locality, two years ago. It makes good hay, and more of it than red clover.

Mr. Cooper—It is not a good bloomer after it has been cut. I would sow no other kind, even if I had no bees.

HOW TO WIRE FRAMES.

"How do you wire frames?"

C. E. Yocom—All the frames I ever wired had triangular top-bars. I pierce a hole near each end of the top-bar—about $\frac{1}{4}$ of an inch from the shoulder; also five other holes at equal distances between these. Treat the bottom-bar in like manner. Then I usually commence at the upper right-hand corner, by driving a $\frac{1}{4}$ inch wire nail, and securing one end of the wire to it. Pass the wire down through the first hole in the top-bar, across the frame through the first hole in the bottom-bar; pass to the right, up through the next hole in the bottom-bar, on up through the corresponding hole in the top-bar; pass to the third hole in the top-bar, down again, and so on until the holes have all been used, securing the end of the wire with another small nail. If the wire be drawn rather taut, the bottom-bar will be sprung up a little, which may be easily straightened, and at the same time draw all kinks from the wire. I use neither diagonal nor horizontal wires.

Mr. Draper—I have an even number of holes in the frames, and, when nailing them together, I leave a nail at each end of the top-bar up a little, to fasten the ends of the wire to.

SIZE OF FRAMES AND HIVES.

It was ascertained that nearly every one present favored the Langstroth size of frame, and 10-frame hives. Mr. Draper uses a larger hive, and says that he can reduce the size of it easier than he can increase the size of a small one. Mr. Draper exhibited a new swarm-trap of his own invention, which consists of a box with triggers and trap-doors, by means of which, it is believed, an issuing swarm may be led or forced into another box, to be hived at the leisure of the apiarist.

The convention then adjourned.

C. E. YOCOM, Sec.

The Voice of Hope.

Written for the Illustrated Home Journal,
BY MRS. LIZZIE A. VORE.

'Tis always proven if we wait, that sunshine follows night;
The darkest night must have a dawn, the longest lane must have a turn—
And the joys most sure and bright,
Are the joys we fairly earn.

Pin no faith to hand of Fate—trust not thou to luck for aid;
Falter not but bravely work, tho' thy path be rough and steep;
By ourselves, our lives are made,
God's sweet grace thy soul will keep.

God's sweet wisdom thee will guide; hew thy future out with care.
There are days of crushing woe, there are hours of deepest pain,
Work thou on with whispered prayer;
Thou a sure reward wilt gain.
Pasadena, Calif.

SPRAYING TREES.

Various Methods of Ridding the Fruit-Trees of Insects.

Written for the American Bee Journal
BY C. GERE.

As fruit-growing is my specialty, I will write a few brief notes from experience.

Spraying fruit-trees with arsenites is comparatively a new thing, and, like many new hobbies in bee-keeping, generally is run to the opposite extreme. Remember, I am writing from my own experience; if others have a better one, let them use it—I shall not disagree with them.

I have seen so much error on this subject, and it is copied from paper to paper, thus doing much harm. It is said to be the best remedy for all kinds of insects that infest all kinds of fruit-trees. This I very much doubt. The man who uses good judgment, is careful, cautious and orderly, can make a success of it on certain kinds of trees, but if he is not, he had better let it entirely alone, as it will kill the fruit, the leaves will drop prematurely, and smaller branches will be killed, even if the tree is not permanently injured.

The apple is the least sensitive of any to a dose of Paris green. I prefer this to any other poison. It should be sprayed a few days after the blossoms have fallen, as then the calyx end of the apple inclines upward, in which end the egg is laid. The spraying may be repeated again in 10 days or 2 weeks. Pears may be sprayed about the same time. I do not use it on cherries, if the trees hang full, as the insects can take one-half, and it will be all the better for the others, thus thinning the fruit. Those insects which we so much hate, are not always our enemies, after all.

I do not use it on plum trees, as I think that the jarring process is the safest and best, all things considered. This consists of a light frame covered with cloth to extend out as far as the branches extend, with an opening to admit the body of the tree. A sharp blow should be given on a large-headed spike, driven into the tree for the purpose. Repeat it every other day, as long as any curculios are found, commencing after the blossoms fall.

As to the remedy, not long since mentioned in the BEE JOURNAL, of saturating a yarn string with turpentine, and tying this around the tree—why, it is perfectly absurd, when we consider the fact that the curculio is perfectly able to fly from tree to tree, and from orchard to orchard.

In regard to spraying before blossoms fall, as given in Mr. Chas. A.

Green's Catalogue, I think that it is very bad advice, to say the least; however, it is not recommended by horticulturists, generally—in fact, I have never seen it in any other place, and I have had pretty free access to horticultural reading. Let us suppose that it would be beneficial, would it not go directly into the blossoms, poisoning the honey which would not only kill the bees, but those that eat the honey—perhaps yourself, family or neighbors, or even the one that did the spraying? This needs no comment. I answer as a fruit-grower and bee-keeper of 30 years' experience, with a decided "No!"

In regard to spraying later in the season for the numerous varieties of caterpillars, etc., that feed on the leaves—it is, in my opinion, perfectly useless, as the experienced eye can go along once a week between two rows of trees, and see the first work of the worms, even, when 2 or 3 leaves have been eaten. I can pick them off by single leaves, or a very small branch, and crush them with the foot.

Of all the insects that infest fruits, none are so hard for me to conquer, as the currant-borer. This brings me to hellebore as a remedy for the currant-worm. It will not do the work for me, not being poisonous enough. It takes more poison for the currant-worm than anything else that I know of, except the potato-bug. I use, for the currant-worm, $\frac{1}{4}$ of a teaspoonful to 2 gallons of water. It is hard to give the right amount to use, as it varies so much in strength. I think that the quantity, as generally given, is much too large; enough should be put in to color the water just a little, and no more. Do not think to make a sure thing of it, and put in more, for you will probably be sorry when it is too late.

Bees did very well here last season, and are very strong now, with every prospect for a good season.

Springfield, Pa., May 10, 1890.

NECTAR.

Its Origin, and Value as Food for Mankind.

Written for the American Bee Journal
BY J. M. HAMBAUGH.

As water is man's pure Heavenly beverage, so extracted honey is Nature's most delightful and health-giving sweet. How inspiring is Nature's process, by which is prepared this Heaven-born food! As the grand old luminary of day mounts the eastern horizon, the dew of the balmy night, as it were, to cleanse all impurities from Nature's flora, reflects like myriads of diamonds

in the clear morning sunlight; and as the rustling winds shake from each tiny cup, its pearly dewdrop, and the warmth from the sun is being gently diffused over Mother Earth, the nectar suitable for the gods begins to flow from the corolla of each and every snowy-crested petal, and as we gaze upon the little-winged harvesters, gracefully flitting from bloom to bloom, we are filled with admiration, and wonder what there can be so enticing in those tiny petals, from which they love to sip. It is delicious honey!

"It is Nature's offering to man, distilled drop by drop in myriads of flowers, by a more delicate and perfect process than any human laboratory ever produced." And Nature's little harvesters are the most delicate and perfect of all gleaners, and are a marvel to the intelligence of antiquity, and to modern science.

Then let us not hesitate to place before our fellow-man this wholesome sweet, in its virgin purity, which can only be accomplished by the use of the extractor.

It should be the universal liquid sweet of every home in the land, in place of the vile stuff called "syrups," usually found upon the markets, which are not fit to take within the stomach.

Let every lover of justice, right and truth, *push* this most laudable enterprise, and see that extracted honey gains a verdict in popular favor which it so justly deserves; and let every honey-producer strive to place his product upon the market in the most inviting manner possible, and let his name accompany each and every package as a synonym of purity, and honest dealing.

Spring, Ills.

Doolittle on Queen-Rearing.

Queens can be reared in the upper stories of hives used for extracted honey, where a queen-excluding honey-board is used, which are as good, if not superior, to Queens reared by any other process; and that, too, while the old Queen is doing duty below, just the same as though Queens were not being reared above. This is a fact, though it is not generally known.

If you desire to know how this can be done—how to have Queens fertilized in upper stories, while the old Queen is laying below—how you may *safely introduce* any Queen, at any time of the year when bees can fly—all about the different races of bees—all about shipping Queens, queen-cages, candy for queen-cages, etc.—all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact everything about the queen-business which you may want to know, send for "Doolittle's Scientific Queen-Rearing," a book of 170 pages, which is nicely bound in cloth, and as interesting as a story. Price, \$1.00.

CONVENTION DIRECTORY.

1890. Time and place of meeting.

July 17.—Carolina, at Charlotte, N. C.
N. P. Lyles, Sec., Derita N. C.

Sept. 10.—Ionia County, at Ionia, Mich.
H. Smith, Sec., Ionia, Mich.

Oct.—Missouri State, at Mexico, Mo.
J. W. Rouse, Sec., Santa Fe, Mo.

[37] In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

International Bee-Association.

PRESIDENT—Hon. R. L. Taylor, Lapeer, Mich.
SECRETARY—C. P. Dadant, Hamilton, Ills.

National Bee-Keepers' Union.

PRESIDENT—James Heddon, Dowagiac, Mich.
SEC'Y. AND MANAGER—T. G. Newman, Chicago.

SELECTIONS FROM OUR LETTER BOX

Late but Large Swarms.

Bees commenced swarming on May 1. Swarming-time is a month late. I hived 15 swarms so far. I never saw such large swarms—oh, they are fine. They are working with a rush. There is so much white clover.
G. B. CARTMELL.

Jackson, Tenn., May 19, 1890.

First Swarm—Cool Weather.

On Sunday, May 18, I had my first swarm in spite of cool weather and frosty nights. Bees are in good condition. I have 160 colonies to start with.

J. V. CALDWELL.

Cambridge, Ills., May 19, 1890.

Bee-Keeping in Mississippi.

Bees are in fine condition now. The winter was so mild that none were lost in this part of the country, but all colonies are strong and healthy, and also ready for our best honey-flow, which is from whitewood or poplar; but it has been raining so much that the bees have stored but very little honey so far. We have no clover, buckwheat, nor any kind of artificial pasturage in this vicinity, and consequently not a very large honey crop—only about 25 or 30 pounds per colony of comb honey, which sells for about 12 or 15 cents per pound; but I am going to keep bees as long as they do that well, for there is some profit in them, and I love to work with them so well that I cannot think of giving them up.
W. R. TATE.

Goodman, Miss., May 20, 1890.

Bee-Keeping in Minnesota.

Bees have not wintered or "sprunged" well in this locality. I think that about 75 per cent. of the bees have died within a radius of 4 miles of this place. One man had 24 colonies, and lost them all; another lost 23 out of 24; another, 15 out of 16; another, 7 out of 10, and some with a few colonies lost all they had. Albert Moses, who put into winter quarters 100 colonies, lost about 20 per cent. I lost 2 out of 11 colonies. My bees had the diarrhea badly, and spring dwindling has been bad also. We have a very cold, dry spring, so

that bees have done but very little. To-day it snowed hard for about 2 hours, with the mercury at 34 degrees. I have a theory for the heavy loss in bees, but of course I do not know that I am correct. Last season was very dry, so that after basswood, bees did not store any honey worth speaking of, consequently the queens must have ceased laying early, and a great many of the bees died of old age, and I think that the honey was poisonous to them. Our prospect for white clover is very poor, and we do not look for much basswood, as the past two seasons have been good; however, the bee-business is a hopeful one, and we will continue to trust, and hope for the best.

J. S. MCINTIRE.

Maple Plain, Minn., May 7, 1890.

Sowing Japanese Buckwheat.

On page 332, Geo. Frey asks a question about Japanese buckwheat. I would say that in this locality I aim to sow buckwheat about June 15. Last season I sowed 3 bushels of Japanese buckwheat on 5 acres, on June 17, from which I threshed 150 bushels of clean seed. I had 11 pounds of seed extra, which I sowed later at intervals, on the roadside, some of which was sown on July 17, and nearly all ripened. From the 11 pounds sowed, I got 10 bushels.

E. C. EAGLESFIELD.

Berlin, Wis., May 16, 1890.

Prospects Good for a Crop.

Our colonies are all strong, but it is so wet that they cannot gather much honey, or anything else. I have 26 colonies; had a swarm yesterday, and if we get some warm, fine weather, I will have several more swarms soon. I only lost one colony out of 27, having wintered them in chaff hives. The prospects are good for a honey crop this year.

J. A. BARNES.

Pardoe, Pa., May 19, 1890.

Late Swarming Expected.

My bees have wintered well—I lost but 2 small colonies out of 46. They began to build up quite early, but of late we have had so much rain and cold weather that they are nearly idle. Apple trees are not yet in bloom here, and swarming will be very late, I think.

JOHN K. RICH.

Cato, N. Y., May 20, 1890.

Wet and Cold Weather.

My bees have just commenced to work on apple bloom. I had to feed them from April 26 until May 15. Early breeding run them out of stores. They did not get to work more than one day on fruit-bloom, on account of wet and cold weather. It is still raining here. The meadows and pastures are getting white with clover. If the weather would be favorable, I think that the bees would soon store lots of honey. They will be very late swarming this season.

JOSEPH A. WEEKS.

Young's Creek, Ind., May 19, 1890.

Discouraging Prospects.

My bees wintered splendidly, but as the spring has been so cold and dry, so that they could not gather much honey, they have to be fed, at least some of them, and now, as the white clover is coming into bloom, I hope that they will gather a little honey; but it looks very discouraging, as last night we had a hard frost, and it is so very dry.

JOHN HASKINS.

Empire Prairie, Mo., May 16, 1890.

White Clover Just Blooming.

Bees are doing better here than ever before at this time of the year. The hives are full of apple and wild-plum honey. Young bees and drones are flying thick, and white clover is just coming into bloom.

G. W. WILCOX.

Hopkins, Mo., May 14, 1890.

The Season's First Swarm.

I had my first swarm for this season on Friday, May 9. The swarm issued during my absence, and either absconded or returned. However, I had a swarm.

WILL M. BARNUM.

Angelica, N. Y., May 12, 1890.

Putting on the Supers.

I stored 35 colonies of bees in the cellar last fall, and they came out in fine condition this spring, except one colony, in which the queen had died. The spring has been rather cold, and very dry, and the bees have done well, the hives being well filled with brood, and drones are flying, so I will look for swarms soon. When is the proper time to put on the supers?

SAMUEL LAW.

Winterset, Iowa, May 13, 1890.

[Put on the supers as soon as the bees are numerous enough to gather the harvest, and the honey-flow has commenced.—ED.]

Cool Weather—Results in 1889.

I commenced with 15 colonies, spring count, in 1889, increased my apiary, by natural swarming, to 50 colonies, and had 2,000 pounds of honey in one-pound sections. I wintered the bees on the summer stands, and now have 48 colonies, 2 having died. Both of the colonies were lost last fall, when I found them to be queenless. My bees are doing well. I think that I will have swarms by the 20th, if it does not keep too cool. The weather is very cool at present, for this time of year. It snowed some to-day.

C. W. BAKER.

Martinsville, Mo., May 6, 1890.

Raining Nearly Half the Time.

I put 83 colonies into the cellar last fall, and took them all out this spring in very good condition. They are doing very good work at present, considering the chance they have to move, as it rains nearly half the time here, or has done so for the last 2 or 3 weeks. The prospect is very fine for a large crop of small fruit, and that means honey also, as well as berries.

WM. A. HODGE.

Victory, Wis., May 22, 1890.

Bees Dying Very Fast.

In March, two colonies of my bees commenced dying. The oldest bees died first. It commenced in a colony reared from a queen that I received from an Ohio queen-breeder last July. The bees turn a dark, shiny color, and before they die, the bees haul them out of the hive. They are very much swollen, and are filled with a clear, watery substance, like very thin honey. The drones go the same way, and, I think, one queen. After the bees are pulled out, they keep still, except occasionally they jerk their wings as if alarmed; 2 colonies are nearly all gone. I have examined the brood carefully in all stages, and find nothing wrong with it; 2 of the colonies (there are 4 dying) are rearing brood about as fast as they are dying. All were strong

colonies. After a night when the temperature is as low as 50 degrees, they die faster; some days, as much as half a pint die. All the colonies gather honey as fast as the number not affected would do in a healthy colony. No young bees die. The affected colonies are in different parts of the apiary of 42 colonies. Some days, scarcely any die, and then for several days they die very fast. Except the 4 sick ones, my bees are doing well. I think that there was not a day last winter that they did not gather honey and pollen. Now, what is the matter with my bees? and what is the remedy? A neighbor has one colony affected in the same way.

P. S.—May 13—I have looked over my 4 colonies of sick bees; 2 of them, I think, have lost a quart of bees each, in the last 24 hours; the other 2 have only about a quart each left. I see no cause why they should die.

P. W. McFATRIDGE.

Ontario, Calif., May 12, 1890.

Wintered Well—but Starving.

Bees wintered well, but consumed a good deal of honey. There were a very few weeks but they were out for a fight during the winter, as it was a very mild one here. Our first honey for the bees was from the yellow willow; it started them to breeding nicely, and I thought that they would be in good condition to gather the main crop, which is from white clover. The weather was cold and wet for about two weeks, and the bees obtained nothing from fruit-bloom, they had consumed all their willow honey, and were in a starving condition before I discovered their real state. They were killing the drones and uncapping the brood. I began to feed them immediately. I find, by inquiry, that there are a great many bees starving in this neighborhood. I had 45 colonies, fall count, but doubled-up to 35 this spring. I am also working 25 colonies for my neighbor for part of the honey.

J. G. CREIGHTON.

Preston, O., May 18, 1890.

The Results of Last Season.

Bees have wintered well in this locality. It has been a very open winter, and there has not been snow enough to make good sleighing. The past winter bees could fly most of the time when it did not rain and the sun shone. I started on May 1, 1889, with 24 colonies; I sold over 1,500 pounds of honey, and increased to 52 colonies. About one third of the honey was clover and linden, and the balance buckwheat and corn. Clover honey is sold for 15 cents per pound; buckwheat for 10 and 12 cents per pound. I lost only 2 colonies, one of which was queenless, and the other was robbed. It has been very wet this spring. It is raining now, and there is scarcely any grain sown here yet. Bees are carrying in pollen when it does not rain, and drones are running about the entrances of the hives. There is a good prospect for white clover, if frost does not injure it later on. I learn more out of the BEE JOURNAL each week, by reading the experiences of others, than I could in one year by doing without it.

E. A. HENDERSON.

Greenfield, Pa. May 13, 1890.

Good Prospects for White Clover

We are having cold weather and frosts at night. Bees are in fine condition. I had my first swarm to-day; who, in Iowa, can beat this? The prospects for white clover are very good this year.

N. STAININGER.

Tipton, Iowa, May 17, 1890.

Good Results in Bee-Keeping.

I commenced last spring with 20 colonies in Langstroth hives. I sold, and used in my own family, \$350 worth of honey, and this spring I sold 33 colonies of bees for \$110, the hives to be returned to me this summer after the bees are transferred into different hives. The hives will be worth to me at least \$30, making in all 490; and I have 5 colonies left to start with again. I took off, last year, 2,700 pounds of honey, and sold it all in Morris at from 12½ to 15 cents per pound, besides a good deal that I did not count, where the sections were only partly full. The cold rains last September shortened my crop a good deal. My success with bees is wholly due to the instructions that I have gained by reading the AMERICAN BEE JOURNAL. It will pay every man to take it, who has one colony of bees.

H. C. GIFFORD.
Morris, Ills., May 18, 1890.

Bees will Starve unless Fed.

My bees are cutting down young drones almost matured, by the hundred, and dragging them from the brood-chamber. On examination, I find the hives full of brood and young bees, but no honey. Owing to the mild winter, bees in eastern Ohio commenced rearing brood in January, and since that time they have consumed a vast amount of stores. Now they are destitute. On May 1, my bees had honey in abundance, but since that time we have had rain almost every day, and the weather has been cool and damp, and bees can gather nothing from flowers, from the fact that there is nothing to gather. It is my candid opinion, if bees are not kindly cared for until white clover comes in bloom, that one-half the colonies in Eastern Ohio will die of starvation.

JACOB OSWALT.
Maximo, O., May 21, 1890.

Cold and Wet in Canada.

The bees came out in good condition this spring, but the weather has been very cold, and the last two weeks or more have been wet, so that the bees have been confined to their hives nearly all the time.

JOHN DEWAR.
Tiverton, Ont., May 22, 1890.

We Club the American Bee Journal for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	Club.
The American Bee Journal.....	\$1 00.....	1 75
and Gleanings in Bee-Culture.....	2 00.....	1 75
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Bee-Keepers' Review.....	1 50.....	1 40
The Apiculturist.....	1 75.....	1 65
Bee-Keepers' Advance.....	1 50.....	1 40
Canadian Bee Journal.....	2 00.....	1 80
The 7 above-named papers.....	5 25.....	5 00
and Langstroth Revised (Dadant).....	3 00.....	2 75
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Quinby's New Bee-Keeping.....	2 50.....	2 25
Doolittle on Queen-Rearing.....	2 00.....	1 75
Bees and Honey (Newman).....	2 00.....	1 75
Blinder for Am. Bee Journal.....	1 60.....	1 50
Dzierzon's Bee-Book (cloth).....	3 00.....	2 00
Root's A B C of Bee-Culture.....	2 25.....	2 10
Farmer's Account Book.....	4 00.....	2 20
Western World Guide.....	1 50.....	1 30
Heddon's book, "Success,".....	1 50.....	1 40
A Year Among the Bees.....	1 50.....	1 35
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Weekly Inter-Ocean.....	2 00.....	1 75
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American Poultry Journal.....	2 25.....	1 50
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BUSINESS MANAGER.

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☞ Calvert's No. 1 Phenol, mentioned in Cheshire's Pamphlet on pages 16 and 17, as a cure for foul brood, can be procured at this office at 25 cents per ounce, by express.

☞ The date on the wrapper-label of this paper indicates the end of the month to which you have paid. If that is past, please send us a dollar to advance that date another year.

☞ Please send us the names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you.

☞ Any of the Political Dollar Weekly Newspapers will be clubbed with our JOURNAL at \$1.85 for the two; or with both our HOME JOURNAL and BEE JOURNAL for \$2.50 for all three papers.

☞ As there is another firm of "Newman & Son" in this city, our letters sometimes get mixed. Please write *American Bee Journal* on the corner of your envelopes to save confusion and delay.

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HONEY AND BEESWAX MARKET.

NEW YORK, May 6.—Comb Honey is well cleaned up, with the exception of California 2 lbs., which sell at 10@11c per lb. Extracted is dull at 7c for California, white clover and basswood; Southern, 70@75c per gallon. Beeswax, scarce at 27@28c.

HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

CHICAGO, May 2.—Receipts of honey are light, and demand fair for choice white clover at 13@14c. Other grades are dull and neglected. Extracted, 6½@7½c. Beeswax, bright, 25@26c.; dark, 23@24c.

S. T. FISH & CO., 189 S. Water St.

KANSAS CITY, May 20.—The demand for comb honey continues good. We quote: White 1-lbs., 14c; dark 1-lbs., 10@12c. Extracted, white, 5@7c; amber, 5@6c. Market is in good shape for new crop, which we look for next month.

CLEMONS, CLOON & CO.,
Cor. 4th and Walnut Sts.

CHICAGO, May 1.—Comb honey sells soon after arrival, if white and otherwise desirable, at 12, 13 and 14c; dark comb is slow at 8@10c. Weather is cool and seemingly favorable to its sale. Extracted, 6@8c, according to quality; some with no distinct flavor has sold at 5c. Beeswax—Yellow, about 27c; fancy, 28c; supply light. R. A. BURNETT, 161S. Water St.

MILWAUKEE, May 1.—Demand for honey is rather light. Supply is ample, of both comb and extracted. We quote: Best white 1-lbs., 13@14c; medium 1-lbs., 11@12c; common old 1-lbs., 9@10c. Extracted, white, in barrels and half-barrels, 7@8c; dark, in barrels and half-barrels, 6@6½c. Beeswax, 25@26c; supply light. A. V. BISHOP, 142 W. Water St.

KANSAS CITY, May 2.—The honey market is cleaned up. We quote: 1-lbs. white, 12@13c.; 2-lbs. white, 10@11. Dark 1-lbs., 8@10c.; dark 2-lbs., 8@9c. Extracted, white, 6@6½c.; dark, 5c. Demand good. Waiting for the new crop.

HAMBLIN & BEARSS, 514 Walnut St.

DENVER, May 5.—One-pound sections, 14@16c; extracted, 7@9c. Demand good and supply likely to be exhausted before the new crop comes in. Beeswax, 22@25c.

J. M. CLARK COM. CO., 1517 Blake St.

DETROIT, May 2.—Comb honey is selling slowly at 10@13c. Extracted, 7@8c. Beeswax, scarce at 26@27c.

M. H. HUNT, Bell Branch, Mich.

CINCINNATI, May 1.—Demand is slow for comb honey at 10@14c. No choice white on the market. Extracted is in good demand at 5@8c. Stock is low.

Beeswax is in good demand at 22@26c. for good to choice yellow. C. F. MUTH & SON,
Corner Freeman & Central Aves.

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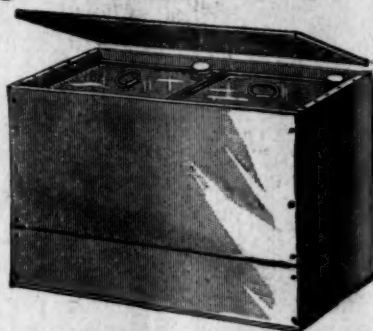
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